2005 Energy Report Proceeding

Staff Proposal for Electricity and Transmission Planning Data Submittals

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Capacity – Resource Accounting Table Demand

| Applies To | Peak Demand Calculations | | | |
|------------|---|--|--|--|
| All | Forecast Total Peak Demand | | | |
| ESP | [Peak Demand – Existing Contracts] | | | |
| ESP | [Peak Demand – New and Renewed Contracts] | | | |
| IOU | Direct Access [-] | | | |
| IOU | CCA and Departing Municipal Load [-] | | | |
| IOU | Uncommitted Price Sensitive DR Programs [-] | | | |
| IOU | Uncommitted Energy Efficiency [-] | | | |
| All | Net Peak Demand for Bundled Customers | | | |

Capacity – Resource Accounting Table Demand

| Applies To | Peak Demand Calculations | | |
|------------|---------------------------------------|--|--|
| All | Net Peak Demand for Bundled Customers | | |
| All | Net Peak Demand + 15% Reserve Margin | | |
| IOU/Muni | Firm Sales Obligations | | |
| All | Final Peak Demand | | |

| Applies To | Existing and Planned Resources | | | |
|------------|--|--|--|--|
| IOU/Muni | Utility-Owned Fossil and Nuclear Resources: | | | |
| | Unit 1 | | | |
| | Unit 2 | | | |
| | | | | |
| | Unit N | | | |
| | Total Utility-Owned Fossil and Nuclear Resources | | | |

| Applies To | Existing and Planned Resources | | | |
|------------|---|--|--|--|
| IOU/Muni | Utility-Owned Hydro Resources (1-in-2): | | | |
| | Total for all plants >30 MW nameplate | | | |
| | Total for all plants ≤30 MW nameplate | | | |
| | Hydro derate for 1-in-5 conditions [-] | | | |
| | [Hydro derate for 1-in-10 conditions] | | | |
| | Total Dependable Hydro Capacity | | | |

| Applies To | Existing and Planned Resources | | | |
|------------|--------------------------------|--|--|--|
| IOU/Muni | Renewable Resources: | | | |
| | Unit 1 (fuel) | | | |
| | Unit 2 (fuel) | | | |
| | | | | |
| | Unit N (fuel) | | | |
| | Total Renewable Capacity | | | |

Existing Contractual Resources

- DWR contracts (IOU)
- QF contracts (IOU, LADWP)
 - Disaggregated by fuel type in CRATs table
 - Utility-specific assumptions re extension
 - Extension of all QFs as must-take energy to be evaluated as a scenario
 - Historical data and projections re future energy, costs asked for separately
- RPS and Other bilateral contracts
 - Detailed information asked for separately

| Applies To | Existing and Planned Resources | | |
|------------|---|--|--|
| All | Existing and Planned Physical Resources and Contracts | | |
| IOU/Muni | Existing Interruptible/Emergency Resources | | |
| IOU/Muni | Uncommitted Dispatchable Demand Response | | |
| All | Total Capacity | | |

Capacity – Resource Accounting Table Future Needs

| Applies To | Existing and Planned Resources | | | |
|------------|----------------------------------|--|--|--|
| All | Generic Renewable Resources | | | |
| All | Generic Non-Renewable Resources: | | | |
| All | Baseload energy | | | |
| All | Load-following energy | | | |
| All | Peaking energy (seasonal) | | | |
| All | Load-following capacity | | | |
| All | Peaking capacity (seasonal) | | | |
| All | Total Capacity Needs | | | |

Renewable Resources

 IOU reference case should include projection of renewable resource capacity and associated energy (by technology, zone/control area) that would be procured to meet a 20% of retail sales target by 2010.

Generic Renewable Capacity Projections

| | 2006 | 2007 | 2008 | |
|------------|------|------|------|--|
| NP15 | | | | |
| Biomass | | | | |
| Geothermal | | | | |
| | | | | |
| Wind | | | | |
| SP15 | | | | |
| Biomass | | | | |
| Geothermal | | | | |
| | | | | |

Bilateral Contracts

- Who must file?
 - All LSEs required to file supply forms
- For what contracts must information be provided?
 - All bilateral contracts of one quarter or more in length or for periods in two or more calendar years, except
 - QF contracts
 - DWR contracts
 - Contracts between California IOUs and public utilities for the integration of hydro resources

Bilateral Contracts

Information requested

- Counterparty
- Inception/expiration date
- Product(s)
- Availability
- Firmness
- Must-take characteristics

- Unit/Portfolio/SystemPower
- Delivery point(s)
- Dispatchability
- PerformanceRequirements
- Termination/ExtensionClauses

Uncertainty and Scenarios

- Load Obligations (Core/Non-core)
- Transmission upgrades
- Local reliability
- Sensitivity of costs to natural gas and wholesale electricity price changes
- Carbon/GHG policy
- Accelerated renewables
- QF policy

Core/Non-core

 IOUs to submit a scenario in which 75% of customers with peak demand of 500 kW or more will depart during 2009 – 2012 (30% in 2009, 15% in each of 2010 – 2012).

Transmission Upgrades

 Any reference case which assumes a major transmission upgrade which has yet to be approved should be accompanied by a scenario in which the upgrade does not take place.

Deliverability

- ISO undertaking studies in context of Resource Adequacy proceeding including assessment of capacity needed to meet local resource adequacy requirements.
- If reference case does not assume IOU has responsibility for meeting capacity needs associated with local reliability, a scenario which does so should be submitted.

Price Sensitivity

 IOUs should provide estimates of the impact of meeting load obligations in reference case under 90/10 natural gas prices.

Carbon/GHG Risk

- CPUC has directed IOUs to include fossil adder in RFO bid evaluations
- IOUs are asked to submit discussion of CO₂ adder of \$8 - \$25/ton on costs of meeting load obligations in reference case, potential impact on procurement choices

Accelerated Renewables

- IOUs are asked to submit generic renewable projections for a resource plan in which targets as recommended in 2004 IEPR are met (28%/2016).
- LADWP and SMUD are asked to submit generic renewable projections for both 20%/2010 and 28%/2016 targets.
- All 5 entities are asked to discuss describe the potential cost (direct costs, additional transmission, etc.) to ratepayers of meeting these RPS goals. They are also asked to describe barriers which are limiting their ability to implement or enforce an RPS and what might be done to reduce or overcome each such barrier.

QF Policy

- CPUC has not directed IOUs to assume extension of QF contracts in LTPP.
- IOUs should discuss the impact of assuming all QFs provide must-take energy in lieu of assumption made in reference case.

Other Data Requested

- Historical hourly QF purchases
 - to assess QF capacity during peak hours
 - -2003 2004
 - by contract (aggregated < 10 MW by technology)
- Projected QF generation & costs
 - -2006 2016
 - by contract (aggregated < 10 MW by technology and pricing mechanism)

QF Projections

- Contract Name
- Contract ID
- Termination date
- Contract Capacity
- Pricing mechanism

Estimates for each year

- energy
- energy payments
- capacity payments

Other Data Requested...

- Historical hourly hydro generation data
 - For 1998 2004
 - From LADWP, SMUD, IID, CCSF, USBR,
 TID, MWD
 - To assess hydro capacity at peak under various hydrology conditions
 - By facility, in support of Environmental Performance Report

Other Data Requested...

- Hourly wind generation survey & data
 - To determine "state of the art" component of wind generation
 - In cooperation with CalWEA
 - (QF) data from IOUs, granular data from selected generators

Filing Dates

- March 1, 2005 for materials related to reference case and hydro, QF and bilateral contract information
- April 1, 2005 for "uncertainty" analyses